UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,420	02/21/2001	Oh Nam Kwon	8733.388.00	5851
	7590 02/08/200 ONG & ALDRIDGE L	EXAMINER		
1900 K STREET, NW WASHINGTON, DC 20006			RUDE, TIMOTHY L	
			ART UNIT	PAPER NUMBER
			2871	
	1000			
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		02/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

M

	Application No.	Applicant(s)				
Office Action Summany	09/788,420	KWON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Timothy L. Rude	2871				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be time  fill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	L. lely filed the mailing date of this communication.				
Status						
1)⊠ Responsive to communication(s) filed on 20 Oc	Responsive to communication(s) filed on 20 October 2006.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-9 and 11-26 is/are pending in the application.</li> <li>4a) Of the above claim(s) 11-26 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-9 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate				

Art Unit: 2871

### **DETAILED ACTION**

## Claims and Claim Objections

Claim 1 is amended. Claim 1 is objected to because "first conductive exposed" should read - - first conductive layer exposed - - (one place, per rejection below).

Appropriate correction is required.

## Drawings

The drawings are objected to because important structural features are not numbered.

In Figures 1A-1E, items 12 and 14 are each two-layered structures, and in Figures 1C-1E, items 22, and 24 are each two-layered structures. Individual numbers should be given to each layer because the layered structure is the main focus of the instant Application. Examiner suggests 12A, 14A, 22A, and 24A for lower layers and 12B, 14B, 22B, and 24B for upper layers. The specification should also be amended to explain these two-layered structures. See Specification page 3, line 18, through page 4, line 4. Examiner considers the subject matter to be disclosed, but it should be made more clear with proper reference to the two-layered structures.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's admitted prior art (APA).

As to claims 1 and 8-9, AAPA discloses a liquid crystal display (LCD) device

Application/Control Number: 09/788,420

Art Unit: 2871

(Fig. 1E) having a substrate (10), a first conductive layer (12 and 14) on the substrate, a first insulating layer (16) on the first conductive layer, a semiconductor layer (18) on the first insulating layer, a second conductive layer (20) on the semiconductor layer, a third conductive layer, (22 and unlabeled layer below 24), on the second conductive layer, a second insulating layer (26) on the third conductive layer, the second insulating layer having a first contact hole exposing a portion of the third conductive layer (contact hole for pixel electrode) and a second contact hole (hole between 14 and 30) exposing the portion of the first conductive (layer) exposed by the first insulating layer, a fourth conductive layer (28) on the second insulating layer and electrically contacting the third conductive layer, and a fifth conductive layer (30) on the second insulating layer and electrically contacting the first conductive layer through the second contact hole; and a sixth conductive layer, (24 and unlabeled layer above 14), between and in contact with both the exposed portion of the third conductive layer and the fourth conductive layer and, (unlabeled layer above 14), between and in contact with both the first conductive layer (14) and the fifth conductive layer (30).

Page 4

Regarding claims 2-3, APA discloses an LCD device as recited above where the first conductive layer includes aluminum metal (Specification page 3, lines 1-4 and 18-23).

As per claim 4, APA discloses an LCD device as recited above where the second conductive layer (20) includes an impurity-doped semiconductor (Specification page 3, lines 4-7).

As to claims 5-6, APA discloses an LCD device as recited above where the third conductive layer has a first (22) and second (unlabeled layer below 24) parts that include metal and in between the first and second parts is where the semiconductor is etched (Specification page 3, lines 10-12 and page 4, lines 1-4).

Regarding claim 7, APA discloses an LCD device as recited above where the fourth conductive layer includes a transparent electrode (Specification page 3, lines 14-17).

# Response to Arguments

Applicant's arguments with respect to claims 1-9 have been considered but are most in view of the new ground(s) of rejection.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Supervisory Patent Examiner** 

Technology Center 2800

Timothy L Rude Examiner

Art Unit 2871

tlr